



Attorney Docket No.: 4324.224-US

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Hansen et al. Confirmation No: 2312

Serial No.: 09/467,368 Group Art Unit: 1652

Filed: December 21, 1999 Examiner: Rao, M

For: Animal Feed Additives

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, DC 20231

Sir:

Please amend the above-identified application as follows:

**IN THE CLAIMS:**

Please cancel claims 19-29 without prejudice or disclaimer. Please add new claims 30-53:

30. An isolated xylanase having  
(a) a pH-optimum in the range of 4.5-7.5; and  
(b) a residual xylanase activity after incubation for 60 minutes at pH 6.0 selected from one or more of:  
(i) more than 96% residual activity when measured at 60°C,  
(ii) more than 83% residual activity when measured at 65°C,  
(iii) more than 20% residual activity when measured at 70°C, and  
(iv) more than 10% residual activity when measured at 75°C.

31. The xylanase of claim 30, which is derived from a thermophilic fungus.

32. The xylanase of claim 31, wherein the thermophilic fungus is selected from the group consisting of *Byssochlamus*, *Chaetomium*, *Humicola*, *Malbranchea*, *Mucor*, *Myceliophthora*, *Paecilomyces*, *Talaromyces*, *Thermoascus*, *Thermomyces* and *Thielavia*.

33. The xylanase of claim 31, wherein the thermophilic fungus is a *Pyrenomyces*.